

	<p>Pierce County Department of Public Works and Utilities Transportation Services Road Operations Division</p> <p>Standard Procedure #11xx</p>	<p>Page # of #</p> <p>Effective Date Pending Approval</p> <p>Revision Date</p>
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Hazardous Material Spill Response

Purpose: This procedure is intended to provide guidelines for Road Operations staff to follow when faced with a hazardous material spill at County facilities, or on County Road ROWs

1.0 Background

Pierce County Road Operations Division, hereafter referred to as "Operations" dispatches from four (4) regional road shops to perform typical maintenance tasks such as sweeping, grading, resurfacing of roads and rights of ways, and the maintenance and cleaning of associated drainage systems. Each shop houses 30 to 45 employees, equipment and materials necessary to perform maintenance work, and a mechanics bay where minor repairs are performed. Operations provides road maintenance services for unincorporated Pierce County, and the City's of Lakewood, University Place, and Edgewood

Some hazardous materials are used at these four facilities and our personnel are called on to contain, clean up, and dispose of small, non-emergency hazardous material spills that occur within the road right-of-ways we maintain. It is our intention to limit the amount of hazardous waste generated at our road shops by limiting the mechanics duties to minor maintenance activities such as oil changes, hose replacement, etc. All major engine work and repairs will be done at the Equipment Services Division facility.

The purposes of this plan is to be in conformance with WAC 173-303-200(e), and to provide Operations personnel with information on protecting themselves and managing emergencies caused by spills of hazardous and regulated wastes.

1.1 Emergency Response Procedures

Procedures for responding to spill incidents are determined on a case-by-case basis. Incidents vary in their cause, severity, duration, mitigation, etc. Based upon the information available at the time of the emergency, the incident is evaluated with respect to the site's response capabilities. Incident characterization and analysis include a preliminary evaluation and hazard identification. Upon completion of the incident characterization, appropriate steps are immediately implemented to respond to the incident using the specified procedures.

Safety, health and environmental regulations concerning training and competencies dictate the response activities of the employees at the site or facility. Regulations also provide the determination of "emergency" incidents as compared to "incidental" or "non-emergency" incidents. Federal regulations at 29 CFR 1910.120(a) (3) and state regulations at; WAC 296-843-300 defines an "emergency response" as:

An organized response to an anticipated release of a hazardous substance that is or could become, an uncontrolled release.

The regulations also define situations that are not "emergency" responses. These situations include:

A release that can be safely controlled at the time of the release and doesn't have the potential to become an uncontrolled release.

These definitions set the guidelines of emergency response procedures at the four (4) Pierce County maintenance shops and within the right-of-ways we maintain

1.2 Discovery and Evaluation

Upon discovery of a leak, spill, or other type of hazardous substance incident, the affected employee(s) must make several critical evaluations. These initial evaluations determine the type of incident and the scope of the corresponding response to the particular type of incident.

The following questions must be answered:

- Is a hazardous material involved?
- Is there a possible health or safety hazard?
- Who can safely and legally respond?

As discussed before, emergency response procedures are determined by the type and severity of the incident as well as the training and competencies of the employees. The question of, "who can safely and legally respond", is dictated by the characteristics of the incident and the initial evaluation of the incident. See Table 1 for description of general incident situations.

Table 1
Incident Response Scenarios

<u>Incident Scenario</u>	<u>Hazard?</u>	<u>Responders</u>	<u>Type of Incident</u>
non-hazardous substance	No	area shop-level personnel	non emergency
smaller quantity of or minor-risk hazardous substance	potential	area shop-level maintenance personnel.	non emergency
larger quantity of or major-risk hazardous substance	yes	Fire Department, or Department of Ecology Spill Response Team	emergency

1.3 Isolating, Evacuating, and Notifying

As determined by the characteristics of the incident, various degrees of isolation, evacuation, and notification are required. All are necessary to allow effective response to the incident, recovery from the incident's impact and to resume normal operations. Using the same basis of incident scenarios found above in Table 1, Table 2 outlines general isolation, evacuation, and notification procedures.

Table 2
Isolation, evacuation, and Notification Scenarios

<u>Incident Scenarios</u>	<u>Isolation</u>	<u>Evacuation</u>	<u>Notification</u>
non-hazardous substance	immediate area	no	supervisor
smaller quantity of or minor-risk hazardous substance	immediate area	no	supervisor
larger quantity of or major-risk hazardous substance	immediate and shop areas or building	shop area or building	supervisor <u>and</u> fire dept.

1.4 Responding to Emergency Incidents

Emergency response incidents include fire, explosion, and uncontrolled releases of hazardous substances. Procedures for responding to these incidents are determined by the exact nature of the incident and the specific hazardous substances involved in the emergency. The following sections describe the typical procedures that are used in the event of fire, explosion, or unexpected releases of hazardous substances.

Fire

All fires are immediately reported to the local fire department by the immediate supervisor. Personnel in the immediate area are alerted and evacuated to a safe distance. If the fire is small, and if it is safe to do so, personnel shall use portable fire extinguishers to put the fire out. Personnel shall not attempt to extinguish large fires that are clearly out of control. Our first and foremost concern is for the safety of our personnel, then the building or property. These more severe incidents are managed by professional firefighters from the local fire department.

In all fire incidents, the following procedures apply: personnel shall ensure their own safety, nonessential personnel are kept at a safe distance, and reentry is allowed only when authorized by the fire department or appropriate authority.

Fire Emergency Notification: Dial 9-1-1 or LESA Radio: 253-798-4772

Explosion

All explosions, or potential explosions, are immediately reported to the local fire department. Personnel in the immediate area are alerted and evacuated to a safe distance. Personnel shall not attempt to mitigate any potential explosive situation. If the incident involves a potential threat of explosion due to reactive or unstable chemicals, the Sheriff department is also contacted.

In all explosion incidents, the following procedures apply: personnel shall ensure their own safety, nonessential personnel are kept at a safe distance, and reentry is allowed only when authorized by the appropriate authority.

Explosion Emergency Notification: Dial 9-1-1

Unexpected Releases and Spills

All spills or other unplanned releases of hazardous substances are immediately reported to the supervisor of the area. If, at the time of spill or release, a health or safety hazard exists, standard emergency procedures are implemented and include immediate notification to 9-1-1 and the local fire department. Personnel in the immediate area are alerted and, if necessary, evacuated to a safe distance.

In all hazardous substance spills or releases, the following procedures apply: personnel shall ensure their own safety, nonessential personnel are kept at a safe distance, and re-entry is allowed only when authorized by the appropriate authority.

Spill or Release Emergency Notification: Dial 9-1-1 and
Department of Ecology Spill Response 360-407-6300

Typical procedures for responding to spills and other releases of hazardous substances include, but are not limited to the following:

- Shut off the source by closing valves, plugging pipes, shutting off pumps, or by up righting spilled containers.
- Isolate spills from drains to prevent spreading or entry into the storm or sanitary sewer systems using absorbents, clay drain covers, plastic sheeting, etc.
- Contain spills by constructing dams, dikes, or berms, or other diversionary structures using sorbents, sand, dirt, or other available compatible materials
- Solidify or absorb liquid spills using compatible materials or neutralize using appropriate neutralizing agents.
- Use portable pumps to transfer liquid spills into proper containers from spill areas, sumps, catch basis, etc.
- Removal of contaminated absorbents, sand, or dirt with mechanical sweepers.
- containment of contaminated sands, dirt, or other absorbents in designated impermeable materials bins
- Disposal of contaminated spill control materials at an approved disposal company or landfill.

1.5 Emergency Coordinator

The Emergency Coordinator (EC) for each road shop and district is the on-duty personnel appropriately trained as an EC. Primary and alternate ECs are listed in Table 3. During all hours of operation there is at least one person on site or available by pager who has the responsibility for coordinating all emergency response measures. All designated ECs are thoroughly familiar with the associated facility plans (i.e., contingency, spill prevention, emergency response, etc.), facility operations and activities, waste characteristics and locations, facility records and site layout. All designated ECs have the authority to commit the resources necessary to carry out the emergency response (or associated) plan.

In the event of a hazardous substance emergency incident, the following procedures are implemented by the EC:

1. **Alarms and Communication Systems.** Internal facility alarms or communication systems, as appropriate, are activated immediately to warn and notify facility personnel of a facility emergency. The list of designated ECs is provided below in Table 3.
2. **Agency Contact.** Designated state or local response agencies are contacted immediately if outside assistance is warranted due to the severity of the incident. These agencies include, but are not limited to: National Response Center, Washington Department of Ecology (360-407-6300) and the local fire department.
3. **Incident Analysis.** The character, source, amount and area extent of the hazardous substances are identified immediately in the event of a fire, explosion or other type of release. These analytical functions are both qualitative and quantitative and are performed by a number of the personnel and equipment that respond or are otherwise involved with the emergency. This includes: eye witnesses, support specialists, etc.
4. **Hazard Assessment.** The resultant human health and environmental hazards are assessed, as determined by the incident, concurrent with the incident analysis activities in item 3 above. This includes hazards identification, vulnerability analysis, and risk analysis utilizing sound technical professional judgment.
5. **Evacuation Notification.** All on-site staff and appropriate Emergency Response agencies are notified immediately if the hazard assessment in item four (4) above indicates that human health or the environment on or near the facility are threatened.
6. **Reporting and Notification.** All appropriate government agencies, are notified immediately if the hazard assessment in item four (4) above indicates that human health or the environment outside the facility are threatened.
7. **Initial Verbal Report.** The assessment report to the notified agencies includes: name and telephone number of the reporter; name and address of the facility; time and type of incident; name and quantity of the hazardous substances involved; extent of any injuries; and possible hazards to human health or the environment outside of the facility.
8. **Incident Safety.** All reasonable measures are taken to ensure that fire, explosion, or other type of release do not occur, recur, or spread at the facility. All personnel and equipment that respond to the emergency are staged, positioned, and utilized to effectively prevent any further hazards from occurring. Where applicable, operations or processes will be shut down, containers shall be removed or be isolated, and the released materials are controlled and contained.
9. **Waste Disposition.** Immediately after the emergency, all resultant waste and contamination will be disposed as appropriate. As determined by the incident, and the waste constituents and characteristics, the waste will be managed as a dangerous waste mixture.
10. **Resumption of Operations.** Facility operations are not resumed until all emergency equipment is cleaned, decontaminated, and fit for reuse. This also includes restocking of depleted or expendable supplies and other equipment related activities.

Table 3
Emergency Coordinator List

<u>Road Shop Address</u>	<u>Primary/Alternative EC</u>	<u>Telephone</u>	
		Office	Portable
Puyallup 10411 John Bananola Wy., Puyallup, WA 98374	Ismael Ramirez, Sup -2 Gary Grindley; Sup -1	253-798-3842 253-798-3896	253-377- 5983 253-377-5879
Elk Plain 23101 Mountain Hwy. E., Spanaway WA 98387	Kendal Willits, Sup -2 Michael Alexander, Sup -1	253-798-4980 253-798-4981	253-377-7499 253-377-7498
Lakewood 9515 39 th Ave Ct. SW, Lakewood, WA 98499	Don Wells, Sup -2 Dave Brown, Sup-1	253-798-4972 253-798-4973	253-377-7471 253-377-5889
Purdy 13209 Goodnough Dr., Gig Harbor, WA 98332	Carl Foutz, Sup-2 Linda Goheen, Sup -1	253-798-4949 253-798-4948	253-377-7497 253-377-5934

1.6 Recovering From Emergency Incidents

Recovery, after responding to hazardous substance emergency incidents, includes:

- downgrading the incident to a non-emergency status
- final clean-up of all residual hazardous substances
- disposing of all residual hazardous substances
- decontamination of all protective clothing and response equipment
- ensuring all equipment is fit for reuse and restocked as necessary
- written follow-up report to governmental agencies, if appropriate
- resumption of normal operations
- debrief and critique of response operations

Emergency response operations are downgraded to a non-emergency status after site monitoring indicates such action is feasible and only with concurrence by the Emergency Coordinator. All residual hazardous substances resulting from the emergency incident are cleaned-up, and as appropriate, disposed as hazardous waste. All personal protective clothing and response equipment is decontaminated and the decontamination solutions, if appropriate are managed as hazardous waste. Disposable or expendable emergency response equipment is restocked as necessary and all other equipment is fit for reuse.

A written follow-up report detailing the incident is prepared by the EC or his designee and sent to the appropriate agencies. Further information on this report is provided below in the next section. Normal operations are resumed only after all health and safety hazards have been mitigated. Re-entry into and re-occupancy of the evacuated areas is authorized only after concurrence by the Emergency Coordinator.

1.7 Reporting and Notification Requirements

Numerous federal and state regulations require the reporting and notification of emergency incidents involving hazardous substance releases. Reporting and notification includes both the initial contact, usually by telephone, as well as a written follow-up submitted to the appropriate agencies within fifteen (15) days of the incident. The initial contact is made either "immediately" or "within 24 hours" as determined by the specific regulations and the type and severity of the incident. The written follow-up report provides information to supplement the information that was provided during the initial verbal report.

The written report must include the following information: name, address, and telephone number of the owner or operator; name, address, and telephone number of the facility; date, time and type of incident (e.g., fire, explosion); name and quantity of materials involved; the extent of injuries, if any; an assessment of actual or potential hazards to human health or the environment, where this is applicable; estimated quantity and disposition of recovered material that resulted from the incident; cause of incident; and description of corrective action taken to prevent re-occurrence of the incident.

Table 4 provides the list of government agencies and telephone numbers to be called, as appropriate, as determined by the actual emergency incident.

Table 4
Government Agencies and Telephone Numbers

<u>Agency</u>	<u>Telephone</u>
National Response Center	800-424-8802
Washington State Department of Ecology	360-407-6300
U.S. Environmental Protection Agency (Seattle)	253-553-1263
Washington State Emergency Response Commission (Olympia)	800-258-5990
Washington Department of Labor & Industries (Seattle)	425-281-5470
Washington State Department of Transportation (Olympia)	360-705-7850
Fire Department (Emergency)	911

Table 5
Emergency Equipment for Hazardous Waste/Material Areas

Spill Kit Inventory

Yellow / Blue Kits

2 / 3"x4' white oil only booms
 2 / 3"x4' universal booms
 4 / white oil only pads
 4 / universal pads
 6 pr. nitrile gloves
 1 pr rubber gloves
 ½ pound Plug and Dike
 2 litter bags

Shop Supply Room

Emergency eye wash shower inside bay
 Shop Vacuum

Shop Supplies

Complete Kits	(3)
Goggles	(6)
Gloves – Nitrile	Box
Rubber Gloves	4 pr.
Disposal Waste Bags	(250)
Fuel Tank stop leak P N D	½ #
5"x10' Boom Oil Absorbent (White)	(2)
3"x 4' Boom Oil Absorbent (White)	(8)
3"x4' Boom Universal Absorbent	(8)
Pads Oil Absorbent - White	(50)
Pads Universal Absorbent - Gray	(50)
Pillows Oil Absorbent	?
Pillows Universal Absorbent	?
Drain Plug	(2)
Spill Mate lbs	(20)
Floor Sweep	50#

Elk Plain Shop Supply Room (shop re-supply inventory)

Emergency eye wash shower inside bay
 Shop Vacuum

Spill Kit and Spill Response Supply Inventory

Complete Kits	(9)
Goggles	(12)
Gloves – Nitrile	(4) Boxes
Gloves - Vinyl Disposable	(4) Boxes
Disposal Waste Bags	(250)
Fuel Tank stop leak	(4) ½#
5"x10' Boom Oil Absorbent (White)	(10)
3"x4' Boom Oil Absorbent (White)	(50)
3"x4' Boom Universal Absorbent	(50)
3"x16' Boom Universal Absorbent	(10)
Pads - Oil Absorbent - White	(100)
Pads - Universal Absorbent - Gray	(100)
Pillows - Oil Absorbent	(10)

Pillows - Universal Absorbent	(10)	
Drain Socks w/absorbent	(2)	
Drain Plug	(4)	
Spill Mate lbs.	150#	
Floor Sweep	300#	
Fire Extinguishers	(1) 20# ABC	(1) 20# CO ²

Puyallup/Purdy De-Cant Station

SPILL KIT INVENTORY

Spill Response Item	Number Included
Goggles	(1)
Gloves - Nitrile	(2) pr.
Gloves - Vinyl Disposable	(1)
Disposal Waste Bags	(10)
Fuel Tank Leak Epoxy	1/2 pound
Socks - 4' - Oil Absorbent (White)	(4)
Socks - 4' - Universal Absorbent	(4)
Pads - Oil Absorbent - White	(6)
Pads - Universal Absorbent - Gray	(6)
Pillows - Oil Absorbent	(2)
Spill Mate	(2) Pounds
Floor Sweep	(50) Pounds

Road Operations Spill Response Trailers Inventory

Tyvex suits	2 pr. 2 XL
Litter Bags	Box
Nitrile Gloves	Box 50 pr.
Rubber Gloves	2 pr
Hand Sanitizer	1 Bottle
Goggles	2 pr
Tank sealant PND	½ Pound
Spill Mate	20 Pounds
Floor Dry	100 Pounds
30 gallon garbage cans	2 ea.
Absorbent Pads (oil only)	1 Bag
Absorbent Pads (universal)	1 Bag
5"x10' Oil only Booms	40 feet
3"x4' Oil only Booms	1 Container
3"x4' Universal Booms	1 Container
3"x16' Universal Booms	32'
Flat Shovel	1 ea
Pitch Fork	1 ea
Kinney Broom	1 ea
Push Broom	1 ea
20# Fire Extinguisher	1 ABC 1 CO ²
First-Aid Kit	1 ea.
24" Plastic Zip Ties	2 bags
Wooden Stakes 24"	1 Bundle
3# Hammer	1 ea.

Utility Knife W / extra blades	1 ea
Containment Pool	2 ea.
Roll Plastic/Tarps	1 roll



**Pierce County Public Works and Utilities
Road Operations Division
Petroleum or Hazardous Material Spill Report Form**

All Materials	Department of Ecology (1st Call) - Spill Hotline: 360-407-6300 Northwest Office, Bellevue: 1-425-649-7000 National Response Center: 1-800-424-8802 Washington State: 1-800-258-5990 or 1-800-OILS-911	
	- What to ask -	
	Where is the spill?	Is anyone cleaning up the spill?
	What spilled?	Are there resource damages?
How much spilled?	Who is reporting the spill?	
How concentrated is the spilled material?		
Who spilled the material?	How can we get back to you?	

Caller Name: _____ **Business:** _____

Address: _____

City: _____ **State:** _____ **Zip:** _____ **Email:** _____

Phone: _____ **ext.:** _____ **Confidential?:** **YES** **NO**

Additional Contact: _____ **Phone:** _____

Incident Date: _____ / _____ / _____ **Received Date:** _____ / _____ / _____ **Time:** _____ (24hr)

Medium: _____ **Material:** _____ **Quantity:** _____ **Unit Measure:** _____

Source: _____ **Cause:** _____ **Activity:** _____

Impact: _____ **Vehicle or Vessel Type:** _____

Incident Address: _____

City: _____ **State:** _____ **Zip:** _____

Is a drainage course affected? **YES** **NO** Drainage course name/type: _____

Directions/Landmarks (mile post, etc.): _____

Responsible Party: _____ **Phone:** _____

Address: _____ **City:** _____ **State:** _____ **Zip:** _____



**Pierce County Public Works and Utilities
Road Operations Division
Petroleum or Hazardous Material Spill Report Form**

Additional Incident Info: _____

Investigation Information

Investigator(s): _____

Response Date: _____ / _____ / _____ Response Time: _____ (24 hr)

Was Fire Dept Called?: **YES** **NO** Was Spilled Material Identified?: **YES** **NO**

If yes, Material Name: _____

Was an Environmental Company Called? **YES** **NO** Business Name: _____

Describe in detail what was found and any actions taken by Pierce County personnel:

Waste Materials Generated:

Type: _____ Quantity: _____ Where Taken: _____

Type: _____ Quantity: _____ Where Taken: _____

If the following information was found to differ from original report, please note below:

Medium: _____ Material: _____ Quantity: _____ Unit Measure: _____

Source: _____ Cause: _____ Activity: _____

Impact: _____ Vehicle or Vessel Type: _____
